

April 3, 1986

TO: File

FROM: Thomas Munson, Reclamation Hydrologist *TM*

RE: Site Visit of February 7, 1986, Kerley Industries, Inc., Silver Reef Mine, ACT/053/002, Washington County, Utah

On February 7, 1986, Tom Munson, Jim Fricke, Ev Hooper and Kathy Mutz visited the Silver Reef Mine in Washington County, Utah. Jim Fricke and Tom Munson walked the area surrounding the leach pad and ponds. They found an active drainage and several seeps adjacent to the operation. A well was also found in a wet swampy area downhill from the sediment pond adjacent to the site (see pictures in mine file).

Water quality samples were taken from the drainage adjacent to the site both upstream and downstream of the disturbance and sent to the State Health Laboratory. Samples of an exposed chemical pond were taken and sent to the lab and came back with extremely high metals readings in the range of 100,000 to 500,000 ppm. The results of the samples taken from the natural drainage adjacent to the site showed a decrease in the total metals constituents downstream of the site versus an increase in the dissolved salts (see lab sheets in file). The flow upstream of the site was very small, less than 5 gpm, versus 50 to 100 gpm, downstream of the site. Between the two sampling sites there was a considerable amount of subsurface flow, as well as vegetation (i.e., cattails, willows) which may have been a factor in affecting the decrease in metals through filtration of sediments in the water.

Within the disturbed area, there is a significant amount of asphalt under leach ponds and leaching circuit. The leach pads and surrounding soils should be sampled to determine their toxicity and may need to be buried due to excessive salts accumulation in and around the area. One building, tanks associated with the leaching circuit, PVC piping and other miscellaneous trash would have to be removed during reclamation. The current sediment pond could be used during the reclamation construction phase and eliminated upon vegetation establishment or bond release.

btb  
cc: John Whitehead  
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*What stream was sampled?  
Where were the samples taken?*